Bay-Delta Program Project Information Form
Watershed Program - Full Proposal Cover Sheet

1. Full Proposal Title: WESTERN PLACER WATERSHEDS COORDINATION, PLANNING & ASSESSMENT
Concept Proposal Title/Number: WSP01-0105 and WSP01-0093
Applicant: Placer County Planning Department
Applicant Name: Fred Yeager, Planning Director
Applicant Mailing Address: 11414 'B' Avenue, Auburn, CA, 95603
Applicant Telephone: (530) 889-7470 Fax: (530) 889-7499 Email: fyeager@placer.ca.gov
Fiscal Agent Name (if different from above): Karen Mayer
Fiscal Agent Mailing Address: 11414 'B' Avenue, Auburn, CA, 95603
Fiscal Agent Telephone: (530) 889-7470 Fax: (530) 889-7499 Email: kmayer@placer.ca.gov

2. Type of Project: Indicate the primary topic for which you are applying (check only one)

_____Assessment	_____Monitoring
_____Capacity Building	_____Outreach
_____Education	__x__Planning
_____Implementation	_____Research

3. Type of Applicant:

_____Academic Institution/University	_____Non-Profit
_____Federal Agency	_____Private Party
_____Joint Venture	_____State Agency
__x__Local Government	_____Tribe or Tribal Government

4. Location (including County): Placer and Sutter Counties

What major watershed is the project primarily located in:
- _____Klamath River (Coast and Cascade Ranges)
- __x__Sacramento River (Coast, Cascade and Sierra Ranges)
- _____San Joaquin River (Coast and Sierra Ranges)
- _____Bay-Delta (Coast and Sierra Ranges)
- _____Southern CA (Coast and Sierra Ranges)
- _____Tulare Basin (Coast, Sierra and Tehachapi Ranges)

5. Amount of funding requested: $425,764
Cost share/in-kind partners? __x__Yes _____No
Identify partners and amount contributed by each:

Placer County	$72,257
TAC Members	$23,000
Science Education Program (Lincoln High)	$20,000
Sacramento River Watershed Program (DWR)	$30,000
Citizen Monitors	$59,550

6. Have you received funding from CALFED before? __x__Yes _____No
If yes, identify project title and source of funds:

Auburn Ravine/Coon Creek Ecosystem Restoration Project, CALFED (File Reference 97-N05)

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal
2. The individual signing this form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or an organization)
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the Watershed Program Proposal Solicitation Package and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in the Proposal Solicitation Package.

Fred Yeager, Director of Planning
Printed Name of Applicant

Signature of Applicant

April 26, 2001
Date

1. Project Description

Placer County is located 80 miles east of San Francisco, and Auburn, the government center of Placer, is located 120 miles southwest of Reno. The County encompasses 1,506 square miles (including 82.5 square miles of water) and is bounded by Nevada County to the north, the State of Nevada to the east, El Dorado and Sacramento Counties to the south, and Sutter and Yuba Counties to the west.

The Western Placer Watersheds Coordination, Planning and Assessment Project is a three year program to address a wide range of environmental and economic issues in an integrated manner and at a watershed scope. Specifically, funds will be used to:

- Refine a **Ecosystem Restoration Plan** for Auburn Ravine and Coon Creek
- Prepare a **Coordinated Resource Management Plan** for the Pleasant Grove/Curry Creek Watershed
- Develop a formal **Sampling and Monitoring Plan** and Expand **Citizen Monitoring** in the Watersheds
- Increase **Outreach and Education** Efforts
- Utilize a **Watershed Coordinator** to Oversee the Above

The project encompasses the Auburn Ravine, Coon Creek, Pleasant Grove and Curry Creek watersheds in western Placer and eastern Sutter Counties. The creeks, by way of the Cross Canal, are tributaries to the Sacramento River, which is a tributary to the Bay-Delta. The existing Auburn Ravine/Coon Creek (AR/CC) CRMP working group will be utilized to provide direction to this project.

Funding will facilitate and support the development and implementation of a Comprehensive Resource Management Plan (CRMP) for the Pleasant Grove/Curry Creek (PG/CC) watersheds in order to reduce the long-term sediment load carried by the creeks and to identify sources of water quality contamination; expand an existing citizen monitoring program to include all of the western Placer watersheds; and, increase citizen involvement and coordination of all activities in the watersheds through the use of a coordinator for three years.

The streams tend to have very little gravel, a substantial quantity of sediment, warmer waters and a shallow gradient. In general, they have been highly modified and are frequently influenced by agricultural and wastewater discharge and seasonal irrigation flows This project will assist and expand the Central Valley Regional Water Quality Control Board's bioassessment in Auburn Ravine and Pleasant Grove Creeks, two Effluent Dominated Water bodies (letter of support attached).

The project will refine an AR/CC baseline condition report presently under development and funded by a previous CALFED grant. A tool to assist in this refinement is an existing Hydrologic Simulation Program Fortran (HSPF) model. It will be used to address comprehensive water quality and pollution issues in the watershed. The model will be refined to cover a 50 year hydrologic component rather than its present 3 year component.

This application reflects the combination of two CALFED pre-applications submitted in February 2001 (**WSP01-0105 and WSP01-0093**). Since both of the pre-applications utilized the Auburn Ravine/Coon Creek CRMP group for direction, a combined application with distinct yet complementary tasks is appropriate and judicious. These western Placer watersheds face similar issues and stressors.

The scope does not conflict with the City of Roseville's Riparian Management Plan CALFED proposal (**WSP01-0023**). The County's CRMP will establish the framework for watershed goals and restoration activities. However, it will not be able to address Roseville's specific management and maintenance issues in detail. The City's proposal is to tier from and be consistent with the larger watershed plan, ensuring goals to enhance ecological functions are translated and implemented at the community level. Placer County is coordinating with the City and mutual letters of support have been exchanged (attached).

A. Assumptions

Today, 248,399 people live in Placer County. By 2020, the population is projected to grow by an additional 182,000. The Auburn Ravine, Coon Creek, Pleasant Grove, and Curry Creek watersheds are at the center of a significant portion of this population increase and consequently will experience significant changes to their existing condition.

Rapid economic development and the associated population growth within the watersheds have resulted in the conversion of large amounts of land from open space (or agricultural use) to residential, commercial and industrial development. The conversion of such open spaces, agriculture, grasslands and woodlands, to developed areas with impervious surfaces changes the natural hydrologic functions of the original landscape, reducing flood attenuation, natural filtration, and groundwater recharge. Biological functions are also affected by loss of terrestrial wildlife habitat and changing stream flows in aquatic systems. Other problems may be associated with current agricultural land use practices in the lower portions of the watersheds.

Residential and commercial development introduce new challenges in the form of new inputs (i.e. both point-source and non-point-source discharges) into the aquatic system. As development intensifies, these contaminants become more concentrated in the system. Thus, as development continues, a negative feedback loop is established wherein water quality is degraded at the same time that natural treatment systems are debilitated. As development intensifies, so does public sensitivity to the need for flood control, water supply, and open space. A water quality issue has become a quality of life issue.

Although consistent with County policy and state and federal regulations, the use of land for agricultural production has altered the landscape when compared to conditions that existed prior to intensive agricultural development. The long-term agricultural use of the land has significantly altered the landscape within the watershed through land leveling activities, reduction in the extent of riparian and wooded areas, a reduction in biodiversity following land conversions, the application of fertilizers, herbicides and pesticides, and the general disturbance associated with agricultural production.

Currently, many decisions are being made regarding flood control, water supply, wastewater treatment and erosion control with little/no knowledge of the implications to long term watershed health. In fact, Pleasant Grove and Curry Creeks are the last, non-CRMP watersheds in western Placer County, yet they are experiencing the most significant changes. These watersheds also are the only portion of the Cross Canal drain to the Sacramento River that presently do not have a CRMP-sponsored watershed planning effort.

All of the watersheds consist of rural residential in the eastern portion and large-scale agriculture in the west with fast-paced land development in between. It is important to develop and begin implementation of a series of recommended actions for these watersheds. Substantial growth and development has taken place in the watersheds with much more anticipated. The resulting influx of people and urban development has stressed the natural environment. Continued loss of riparian vegetation, stream bank erosion, and sedimentation of the streams contribute to the decline of water quality. As of yet, no comprehensive action plan exists to address these problems.

A comprehensive plan to protect and restore important habitats and species is needed before important resources are lost. The CRMP planning process will incorporate an array of plans and planning activities into a more coherent, coordinated framework for making management decisions. There are inherent difficulties in undertaking an adaptive, action-oriented, coordinated planning process for a large, complex ecosystem. Though not all local, regional, state and federal issues, concerns, interests and mandates can be addressed in a restoration plan or strategy, the planning process will improve communication and coordination among stakeholder groups.

The CRMP will provide a long-term comprehensive management plan to improve watershed ecological health locally and regionally. CALFED has funded the Auburn Ravine/Coon Creek Ecosystem Restoration Planning effort currently underway. Since the watersheds are contiguous and share many of the same issues, the existing Auburn Ravine/Coon Creek CRMP working group will

oversee the Pleasant Grove/Curry Creek (PG/CC) work. The group is a model for successful collaboration and has agreed to expand their work to encompass the PG/CC watersheds.

The CRMP is organized and committed to effectively manage the watershed. It is lacking critical participation from the agricultural and development communities. In general, the agricultural community is unfamiliar with community-based planning efforts. Past experience has led to formidable distrust in government agencies that regulate their activities. However, over the years a foundation is beginning to be laid with the agricultural community. Thus far, the CRMP group has experienced some success in recruiting a core group of farmers representing Western Placer County. These members are becoming educated about watershed stewardship. It is hoped that they, in turn, educate their peers and encourage their active participation.

The development community has shown some interest in participation. They are particularly interested in issues related to wastewater treatment and water delivery. One developer has suggested that the technical members of the CRMP provide assistance to homeowner associations charged with implementation of ongoing environmental permit conditions. For large projects not currently under active development, the watershed coordinator, in consultation with CRMP members, can provide recommended actions that both comply with the permit conditions necessary for development and those that improve watershed health.

This project will vigorously recruit these stakeholders and others, educate them about CALFED's programs, and encourage them to become committed stewards of the watershed. A Coordinator will be utilized to balance the variety of community needs to implement a comprehensive watershed plan.

B. Expected Outcomes

This project will result in the improvement, restoration and enhancement of habitat in and along the Auburn Ravine/Coon Creek and Pleasant Grove/Curry Creek watersheds including:

Element	Section
Auburn Ravine/Coon Creek ERP Refinement	**1B-1**
Pleasant Grove and Curry Creek Watersheds CRMP	**1B-2**
Public Participation/Outreach	**1B-3**
Water Quality Monitoring	**1B-4**
Watershed Coordinator	**1B-5**

The watersheds contain a variety of habitats supporting an array of uses including sensitive wildlife and aquatic species of special concern. Implementation of the completed plan may result in the removal or reduction in a number of primary stressors including alteration of flows and other effects of water management, floodplain and marshplain changes, channel form changes, water quality, water temperature and land use. Reduction and/or removal of these stressors will provide direct and indirect benefits to species such as steelhead, spring-run and fall-run chinook salmon, splittail, delta smelt, red and yellow legged frogs. Water quality will be enhanced as restoration projects to be identified in the plan reduce sediment inputs into the creeks. Riparian protection and restoration is likely to be recommended.

1. Auburn Ravine/Coon Creek ERP Refinement

A summary of the baseline condition of the Auburn Ravine and Coon Creek watersheds will be available in the Ecosystem Restoration Plan (ERP) scheduled for completion in December of 2001. It will be the first comprehensive assessment available for these watersheds. The draft ERP will be reviewed by the CRMP membership and presented in community workshops. The CRMP group will outline the framework for revising the ERP to determine a desired condition, and recommend implementation projects to achieve this condition. An improved hydrologic model will be incorporated into the ERP to cover a 50 year hydrologic component and model nutrient and pollutant contributions to the waterways in the project area.

2. Pleasant Grove/Curry Creek CRMP

A Coordinated Resource Management Plan (CRMP) resulting in the improvement, restoration and enhancement of fisheries habitat, including riparian habitat, in the Pleasant Grove/Curry Creek watersheds in southwestern Placer County will be prepared. The CRMP will create a framework in which the factors that affect landscape ecological functions at a watershed scale in the PG/CC basin are considered in land use decisions in the watershed. It will also provide a context in which citizens will be informed about the alternatives and given an opportunity to participate.

There is no other comprehensive planning process which addresses the full range of issues in the PG/CC watersheds, and the CRMP process is intended to synthesize data from a variety of planning efforts into an integrated plan. The CRMP will emphasize water quality, sediment load, floodplain management, and habitat restoration, while integrating recreational opportunities and water supply needs. In general, specific tasks will identify problems, opportunities and appropriate management strategies. The CRMP will:

- Assess the current status of environmental and human resources in the watersheds;
- Integrate trends in land use and development with watershed planning;
- Assess environmental and human needs, opportunities and objectives;
- Identify potential conflicts and alternative approaches to meeting needs and resolving conflict;
- Evaluate, at a general level, the approaches to conflict resolution, with an emphasis on finding alternatives that meet long-term environmental needs while accommodating planned economic development;
- Identify and prioritize specific projects aimed at achieving measurable water quality improvement and strategies for protection and enhancement of the environment in conjunction with planned economic growth;
- Define the projected environmental and economic benefits and costs of each proposed restoration project or strategy, and identify the parties to whom benefits will accrue;
- Develop implementation plans for the proposed projects, including an analysis of potential local and non-local funding sources;
- Develop a comprehensive monitoring program for the watershed with a focus on indicators of ecological integrity and health;
- Develop a schedule and general budget for implementation; and,
- Sensitize and educate the public regarding CALFED and watershed resource values and to provide them an avenue for hands-on assessment and active involvement in public policymaking.

Overall goals include protecting and restoring riparian and aquatic habitats including anadromous and native resident species, protecting watershed integrity, improving water quality, improving wildlife habitat, and improving the ecological functioning of the watershed. Ecological factors such as connectivity with the mainstream Sacramento River and the integrity of watershed processes will also be examined.

One of the key deliverables of the program will be a list of recommended projects (e.g., fish passage improvement, riparian enhancement, water quality improvements, etc.) that will implement the above objectives.

3. Public Participation/Outreach

To win support and funding, the public must be educated on the multiple values of watershed protection. Complex watershed protection programs require partnerships between jurisdictions and professional disciplines. The public and private sector together with residents can help provide a collaborative solution to water quality problems.

During the past decade, increased attention on smart growth, compact development, affordable housing, farmland preservation, and related issues has underscored the need for reform in order to

effectively manage growth and change. Professional planners, citizens, and interested stakeholders have a unique opportunity to shape the direction of these watersheds.

Through various outreach measures, the project will expand stakeholder participation and commitment targeting the agricultural and development communities, specifically surrounding the Cities of Roseville and Lincoln. Subcommittees or focus groups will also be established to provide direction to developers' community management plans and to receive input from the agricultural community in development of the CRMP and ERP. These committees will be used to provide a mechanism for all stakeholders to be involved and to provide input and feedback.

4. Water Quality Monitoring Program

A formal Sampling and Monitoring Program will be developed to coordinate all monitoring efforts underway by state and local agencies and citizen monitors, including the Central Valley Regional Water Quality Control Board's EDW Bioassessment project and sampling conducted by the Department of Water Resources. This program will include developing a Sampling and Monitoring Plan, a Quality Assurance Project Plan and an Operations Manual for sampling methods and protocols. It will also provide monitor training opportunities and utilize an existing database application for data management such as the Central Coast Ambient Monitoring Program (CCAMP) software and GIS tools provided by the Placer County Planning Department. This program will eliminate duplication of effort, provide standardization and encourage data sharing.

The existing AR/CC Citizen Monitoring Program will recruit volunteers and promote stewardship throughout the watersheds, purchase additional monitoring equipment and expand existing watershed programs at two local high schools (Del Oro and Lincoln). Monitoring will be conducted in the PG/CC watersheds, where there is no such effort presently. Expansion of the Citizen Monitoring Program will support existing sampling and data gathering efforts currently underway by the Regional Water Quality Control Board and the Department of Water Resources.

If the data verifies pollutant or sediment loads in excess of Clean Water Act standards, notification to the RWQCB will be made describing the nature of the assessment and the basis of the recommendation to list the affected watershed on the federal Clean Water Act (Section 303(d)) list.

5. Watershed Coordinator

Education and outreach programs that explain the watershed planning objectives will be implemented by utilizing a Watershed Coordinator, developing a website and publishing a quarterly newsletter. The Coordinator will distribute technical and program information through various media, presentations to stakeholder groups, an information booth/display at public and community events, and participation in community planning and other groups.

The Coordinator will provide a single point of contact for information exchange and CRMP organization. The community will benefit from expanded knowledge of CALFED's goals and objectives. The watershed Coordinator will also organize and oversee the expansion of the citizen monitoring program.

C. Timeline

It is important to develop and begin implementation of management plans in these watersheds because they are in a rapidly developing area of the Sacramento region. A comprehensive plan to protect and restore important habitats and species is needed before additional important resources are lost.

Over a 36-month period, the existing CRMP committee will work with agency staff and a team of biological and planning consultants to implement the work plan in this proposal. Upon approval, work will begin in June 2002.

D. Methodology and Process

Early on, the CRMP committee determined that major emphasis should be placed on restoration and protection of the various ecological structures, functions, and processes in the AR/CC watershed. A

similar approach will be pursued in PG/CC. These watersheds contain a variety of habitats supporting an array of uses including sensitive wildlife and aquatic species of special concern. Implementation of the completed plans will result in the removal or reduction in a number of primary stressors identified by CALFED in their Ecosystem Restoration Program Plan.

The Auburn Ravine/Coon Creek component will refine and expand a baseline condition report that coarsely outlines complex flow regimes (historic, current and future), regional wastewater needs, flood control issues, land use patterns, barriers to fish passage, and geomorphologic character. The AR/CC CRMP group will use this information to make informed decisions regarding restoration actions necessary to achieve a "desired condition" in the watershed.

In Pleasant Grove and Curry Creeks, the CRMP will identify and summarize known public concerns within the watershed; known areas of ecological, hydrological or geological concern; make recommendations for future program development, including restoration and enhancement activities; create a priority-ranked listing of implementable projects; and, present a set of recommendations to the County and other agencies for proceeding with the program.

Portions of Pleasant Grove Creek support a relatively healthy riparian corridor. In some cases the creek contains a largely intact floodplain. It has varied habitat values, with large expanses of open space and urban development side by side. The Pleasant Grove watershed also contains a significant amount of high and low quality vernal pool grassland communities. As it flows through unincorporated Placer County, and the Cities of Rocklin and Roseville, accompanying vegetation is characterized as remnant riparian, riparian scrub, and landscaping. The watershed contains some of the most sought after real estate in a region experiencing intense development pressure.

In contrast, Curry Creek is a smaller stream with very little in the way of riparian habitat. In many cases, Curry Creek only exists as a denuded incised channel in an agricultural field. Its watershed is predominately agriculture, but is expected to be subject to significant changes due to general plan designations allowing for significant urban and suburban land uses. Curry Creek is included in the study area boundaries for a couple of reasons: 1) It is the most southerly portion of the Cross Canal drainage to the Sacramento River and in order to study the entire Cross Canal watershed, it needs to be included and 2), there is an opportunity to conduct a pro-active planning effort because disturbances to the watershed have been chiefly limited to agricultural land modifications. Curry Creek has been designated for significant urban development in its upper reaches and property owners have shown a significant interest in urban development throughout the balance of the watershed. By developing objectives and strategies for implementation now, we can seek to insure that develop in the future is consistent with those objectives.

The plans will be developed with extensive technical and public input. The Coordinator will distribute information regarding the CALFED Bay Delta Program through various media, presentations to stakeholder groups, displays at public and community events, and participation in community planning groups. Project benefits will be distributed equitably within the community through:

- Expansion of stakeholder diversity and participation both socially and geographically.
- Locating meetings/activities/outreach throughout the watersheds.
- Expansion of the Citizens' Monitoring Program to include community members in the all portions of the watersheds.

2. Applicant Qualifications

A. Ability/Experience/Fiscal Agent

The Placer County Planning Department is the applicant. Fred Yeager, Planning Director, is project manager. Placer County is also serving as the fiscal agent. The applicant agrees to comply with all local, state and federal laws and will comply with state standard terms. Karen Mayer, an Administrative Services Officer assigned to the Planning Department, will be the fiscal point of contact. Upon approval, this project will be implemented without delay.

Placer County is currently overseeing several environmental programs and grants. The County has demonstrated a commitment to retaining and restoring environmental quality, as indicated in its General Plan (adopted 1994). Placer County has been participating in monthly CRMP meetings for various watersheds since 1997.

Pursuant to the goals and objectives adopted by the Placer County Board of Supervisors on April 7, 1998, the Placer Legacy Open Space and Agricultural Conservation Program serves as the framework for the development and adoption of a Habitat Conservation Plan (HCP) pursuant to Section 10(a) of the Federal Endangered Species Act and a Natural Communities Conservation Plan (NCCP) pursuant to Chapter 10, Division 3 of the California Fish and Game Code (2800 et. seq.). Staff was directed to prepare the HCP/NCCP to protect the natural attributes of the County, including those habitats associated with sensitive species. Additionally, the HCP/NCCP would provide the program through which the County will obtain regulatory coverage for the State and Federal Endangered Species Act as well as compliance for Federal wetland regulations. The County hopes to have Phase I of the HCP/NCCP in place by mid-2003.

Placer Legacy and CRMP efforts are critical steps toward protection, preservation, and restoration of the integrity, productivity, and biodiversity of the County's unique ecosystems for this and future generations. Conservation actions, including watershed and riparian preservation and enhancement, will be far more efficient under a HCP/NCCP because of its countywide scope and long planning horizon.

The implementation of this project, in a manner consistent with overall CALFED goals and objectives, is essential to local implementation of CALFED programs. The federal, state, and local government, environmental and business leaders, and residents and landowners who are members of the CRMP working group have a wide range of interests and capabilities related to watershed preservation and enhancement. The CRMP group is the best vehicle for developing local responses to the general needs identified in the CALFED process.

B. Available Technical Support

Over the past four years, monthly CRMP meetings have been well attended and productive. CRMP activities have been supported by the Placer County Board of Supervisors and watershed grant projects have been coordinated by the Placer County Planning Department. The Cities of Lincoln, Rocklin and Roseville will participate in this effort.

The existing Auburn Ravine/Coon Creek CRMP working group consists of representatives of a variety of agencies, citizens, land-owners and community interests. Members of the CRMP include the Resource Conservation District, U.S. Fish and Wildlife Service, Wildlands, Inc., Placer Nature Center, Sierra Club, Placer County Water Agency, Nevada Irrigation District, South Sutter Water District, Western Placer Citizens for an Agricultural and Rural Environment (WP Care), Placer County Flood Control District, Sutter County Public Works Department, and the Natural Resources Conservation Service. The CRMP will work with the watershed Coordinator and Planning Department staff to assess the status of environmental conditions and human impacts in the watersheds, develop a comprehensive plan, and prepare implementation strategies.

CRMP membership is on a voluntary basis. Members and the agencies they represent, if any, have significant technical expertise which will be supplemented by utilizing consultant services in the following fields:

- Fishery biology
- Wildlife biology
- Watershed management
- Riparian and aquatic habitat restoration
- Design of low-cost, ecosystem-based monitoring programs
- Land use planning and public involvement
- CEQA/NEPA/ESA and other regulatory compliance issues

C. Previous CALFED or Similar Projects

The work proposed is a logical expansion of an on-going project and merges two pre-applications submitted in February and selected to proceed to full-application stage. In April of 1999, Placer County was awarded a $222,530 grant from the CALFED Bay-Delta program (97-N05). The purpose of the previous grant is to prepare an ecosystem restoration plan (ERP) for the Auburn Ravine, Markham Ravine and Coon Creek watersheds in western Placer County. A December 2001 completion date is anticipated. The specific tasks associated with the previous CALFED grant for AR/CC include the following:

1. Watershed Assessment
2. Land Use Analysis
3. Conflict Identification
4. Prioritization of Restoration Projects
5. Develop Implementation Strategies
6. Monitoring

The AR/CC ERP program has a goal of being inclusive, of bringing together all the diverse and sometimes competing stakeholders/interests in the watershed. While the collection of stakeholders may share some general goals for the watershed, inclusivity implies bringing together a collection of unlike and often competing interests.

The Auburn Ravine and Coon Creek CRMP committee was established in 1997 and has developed clear goals and objectives. CRMP members include representatives from federal and state land management agencies and key local governments in western Placer, as well as major public and private interest groups. Efforts to involve others has been ongoing, particularly the agricultural and development communities. Broad-based local government and community support and participation will ensure that the results are compatible with local desires, plans, policies, and ordinances, and are implementable.

Placer County is managing several grant programs that are complimentary to each other and are part of a larger approach to ecosystem restoration in the southern and western areas of the county. This will be an ongoing project in that implementation of projects will extend beyond the end date of assistance contracts. Other environmental grants currently overseen by the Planning Department include:

- **Dry Creek Coordinated Resource Management Plan and Miners Ravine Restoration Plan** - A $605,400 grant from Proposition 204 to prepare a Coordinated Resource Management Plan for the Dry Creek watershed and to conduct restoration activities along Miners Ravine. The estimated completion date is October 2002.
- **Western Placer County Agricultural Lands Assessment** - Received in 1999 in the amount of $54,090 from the State Department of Conservation to prepare an agricultural assessment of western Placer County. The estimated completion date is August 2001.
- **American River Fuel Load Reduction** - $1,000,000 was awarded to the County for fuel load reduction work in the North and Middle Forks of the American River. This grant is to be completed in March of 2002.
- **Dry Creek Greenway Plan** - Provided to Placer County through the Placer County Transportation Planning Agency in the amount of $250,000 for the development of a greenway corridor in the Dry Creek Watershed.
- **US EPA Western Placer Wetland Assessment Grant** - $42,000. Identify and map non-vernal pool wetlands in western Placer County.

3. Budget

The project cost has been based upon similar Ecosystem Restoration Plan and CRMP efforts in the Dry Creek, American River and Auburn Ravine/Coon Creek watersheds. A consultant(s) will be retained to complete the ERP refinement and to prepare the CRMP. All contracts will be bid according to State bidding requirements. The three year scope of the work plan, the extensive outreach deemed necessary, the preliminary stressors identified as needing attention, and the size of the watersheds involved determined the following costs:

Task/Component	Total Budget	CALFED
1. Administration/Reporting		
County Personnel Services	$24,000	$16,000
Overhead (43.84% of Personnel Line)	$10,521	$7,014
Technical Advisory Committee	$23,000	$0
CEQA/NEPA	$20,000	$10,000
2. AR/CC ERP Refinement		
Professional/Consulting Services	$30,000	$30,000
3. PG/CC CRMP		
Professional/Consulting Services	$125,000	$125,000
4. Outreach Expenses		
Outreach Booth	$2,250	$2,250
Photocopying	$1,500	$500
Postage	$3,500	$3,500
Printing- Newsletter/Brochure	$15,000	$12,500
Watershed Tours	$1,500	$1,000
Web Page	$5,250	$0
5. Citizen Monitoring		
Dept. of Water Resources Sampling	$30,000	$0
Macroinvertebrate Analysis	$36,000	$36,000
Monitoring (travel)	$15,000	$0
Monitors/Science Advisor	$44,550	$0
Science Educ. Program (high schools)	$20,000	$0
Supplies and Equipment	$40,000	$10,000
Water Quality Monitoring Kits	$20,000	$10,000
6. Coordinator ($40,000/yr + benefits)	$156,000	$156,000
Office Supplies	$4,000	$2,500
Travel/Training	$3,500	$3,500
TOTAL BUDGET	**$630,571**	**$425,764**

Percent Match: 32.4

Budget reflects a three-year program. See attached budget sheets for task/budget detail.

4. Technical Feasibility

A. Similarity to Previous Projects

The approach employed for this project has been used successfully by other watershed planning efforts in Placer County, the region and the state. It will employ specific monitoring measures, public involvement in the planning process, and technical evaluation of the watersheds. Science, data management, planning, public education, volunteer coordination, marketing and public relations enable CRMP groups to become the definitive voice for their watersheds.

A watershed-wide approach is valuable because it binds together people from different walks of life such as loggers and miners in the headwaters, farmers and ranchers in the valleys, recreational and environmental interests, businesses and water users in the cities. Approaching problems from a watershed perspective requires us to find common ground among people who see things very differently. It is no coincidence that the watershed approach to problem solving results in a process that is much more inclusive and cooperative than traditional forms of environmental issue resolution.

Collaboration among multiple interests will be achieved by modeling this project after successful partnerships established for similar stakeholder groups. For example, farmers will gain a clearer understanding of the existing program through a core group of spokespersons that are respected members of the agricultural community. Stories of successful restoration actions in other watersheds will be spotlighted in presentations, media events, and news releases.

This project, which enhances the work currently taking place along Auburn Ravine and Coon Creek and proposes a similar effort on Pleasant Grove and Curry Creeks, will seek to address environmental stressors in a cooperative planning atmosphere. These stressors include alteration of flows and other effects of water management, floodplain and marshplain changes, channel form changes, water quality, water temperature, and land use.

Auburn Ravine/Coon Creek Components

The Auburn Ravine and Coon Creek watersheds are somewhat unique in northern California. These drainages are used as conduits to supply water originating from the upper watershed to users in the lower watershed during the summer months. These flow conditions provide excellent habitat conditions for rearing juvenile steelhead and spring-run chinook salmon during the summer.

The project will refine an AR/CC baseline condition report that coarsely outlines complex flow regimes (historic, current and future), regional wastewater treatment strategies, flood control issues, land use patterns, barriers to fish passage, and geomorphologic character. A tool to assist in this refinement is an existing Hydrologic Simulation Program Fortran (HSPF) model. It is being used to address comprehensive water quality and pollution issues in the watershed. Under this proposal, the model will be refined to cover a 50 year hydrologic component rather than its present 3 year component. It will also have the ability to relate a full suite of pollutant and nutrient parameters to determine the contribution from urban, agricultural and/or industrial sources. Finally, the time step in the model is currently month to month. Additional funding will allow the model to characterize hourly flow regimes. The Auburn Ravine/Coon Creek CRMP will use this information to develop a comprehensive watershed management plan, evaluate the characteristics of effluent dominated waterbodies and make informed decisions regarding restoration actions necessary to achieve a desired condition in the watershed.

Pleasant Grove/Creek Components

In the Pleasant Grove and Curry Creek watersheds, the consultant will conduct reconnaissance-level field surveys of the watersheds, with aerial and ground photo documentation, to identify areas of special concern. These concerns will be paired with concerns raised by the public and CRMP members. Issues to be considered include:

- Urban and agricultural land management
- Flood control

- Water quality long-term effect of wastewater discharge on local streams
- Water supply
- Open space, wildlife habitat and recreation
- Fisheries, especially stressors which affect anadromous fish migration and habitats
- Endangered species
- Present and future development: Residential, commercial and industrial
- Roads and utilities

The Coordinated Resource Management Planning process is utilized to integrate watershed management efforts. CRMP efforts address water quality and habitat issues at a watershed level. The CRMP will rely solely on consensus for setting group priorities and coordinating actions. Without formally yielding authority, individual partnership members abide by these group consensus decisions. In absence of a CRMP, it is much more difficult to recognize and plan for beneficial, feasible strategies throughout the geographic scope of the watershed.

Many of the actions and priorities depend on partnerships for implementation. Local actions coordinated by the CRMP group will be carried out by individual agencies, organizations and landowners in adherence to joint consensus-based decisions reflected in their voluntary watershed plans. The projects identified typically rely on agencies, volunteer efforts and local governments to revise regulations, monitor, generate awareness and administer ordinances.

Water Quality Monitoring

Adopting a watershed-based approach to planning is only possible if it is accompanied by an education and outreach program that builds a constituency and rationale for protecting the resources. The public participation campaign will include education of the public at large and solicitation of their involvement in hands-on assessment/monitoring and policy development within the CRMP working group.

Central Valley Regional Water Quality Control Board (RWQC) staff is conducting a bioassessment in Effluent Dependent Water (EDW) bodies in western Placer County. There are four existing municipal wastewater treatment plants, two existing industrial facilities, one municipal facility under construction (Roseville), and one proposed facility (Lincoln Regional) discharging or proposing to discharge to ephemeral or low flow streams. RWQC staff is coordinating efforts with the Dry Creek and AR/CC citizen monitoring groups. The results of this monitoring project will be useful for addressing EDW issues in these watersheds or ecoregions. RWQC is working with stakeholders to create sustainable, watershed level and/or regional solutions to water quality problems. Coordinated and expanded citizen monitoring in these watersheds will complement the RWQC work.

An expanded monitoring program will also continue ongoing work with the Lincoln and Del Oro High School science programs that are using the streams to educate students about biochemical processes and community stewardship.

Education/Outreach/Coordinator

Although CRMP members represent a wide cross-section of the communities and interests in the watersheds, an extensive public involvement and outreach program will be conducted. At appropriate stages of CRMP development, public information meetings will be conducted to ensure that all interested parties have an opportunity to comment on and participate in the development of the CRMP. Community outreach, integrating citizen input throughout the planning and implementation processes, will be an essential component of this project. This will be accomplished through:

- Community forums and events
- Implementing a proactive community information and consultation program
- Designating a convenient location where documents can be reviewed by the public
- Active recruitment of citizens to attend CRMP meetings to solicit suggestions and comments
- Designating the Coordinator as the single contact person to answer residents' questions

Citizen involvement allows checks and balances, causing greater agency accountability. Rather than being a disinterested and effected party by an unpopular action, residents can take an active role in the decision making process with a forum for participation and the assistance of accessible, accurate information.

The Watershed Coordinator will provide a single point of contact for information dissemination on watershed issues. Data, including monitoring information, will be gathered, centrally organized and maintained by the Placer County Planning Department. Information in GIS format will be available on the County website. Data will also be made available through the coordinator to CALFED, its member agencies, and throughout the Sierra foothill region.

This project will expand stakeholder participation and commitment targeting the agricultural and development communities, specifically west of the Cities of Roseville and Lincoln, through the watershed coordinator and organization of focus groups. An emphasis will be placed on the location of 'in neighborhood' public meetings and meetings in Sutter County. Strategies implemented in neighboring watershed programs to achieve consensus between the agricultural, environmental and development communities will be utilized.

The public review process for each CRMP document will include a technical peer review. In addition, there will be on-going appropriate coordination with the technical staff of USFWS, CDFG, USFS, EPA, and NMFS throughout project implementation. This coordination and agency review has been and will continue to be both formal (involving invitation to attend and participate in CRMP meetings) and informal (involving one-on-one coordination between the CRMP members or consultant staff and agency representatives).

B. New Approaches or Methods

Oftentimes, conservation and restoration strategies are too reactive to problems, rather than proactive to prevent damage to healthy systems. Plans are never "done"- each generation sets the stage for the next generation of plans and actions, and every management intervention affords a learning opportunity to gain knowledge about the environmental systems and the efficacy of the tools. Planning must lead to action: There is a clear need to develop and launch key activities. A good restoration strategy consists of a list of specific actions that specific entities will take to solve the problems people care the most about with adequate resources and expected outcomes. Provisions will also be made for adequate long-term monitoring.

Currently the local community has little or no knowledge of CALFED. The information they currently have is often inaccurate due to casual and individual information exchange. Many in the agricultural community are either unaware or question the benefit of participating in the CRMP process. The Watershed Coordinator will investigate existing successful outreach strategies and partnerships between the agricultural, development and environmental communities in neighboring watersheds and incorporate them into a coordinated outreach plan for each of these stakeholder groups. These strategies will include a discussion of the broader connections of this watershed to the Bay-Delta.

Typically, the public does not trust government. As a result, the Coordinator will oversee outreach and education efforts. This liaison approach can work exceptionally well. The Coordinator will work with the CRMP group and will assist in mobilizing the community; not just informing, but involving the public in the process.

The Watershed Coordinator will promote the education of individuals, organizations and agencies. The Coordinator will expand the CRMP group to include all stakeholders in western Placer and Sutter County through focus group meetings, expansion of the Citizens' Monitoring Program and conducting meetings in Sutter County. Information explaining CALFED and project goals will be distributed to stakeholders and will be available on the County website. The website will also explain CALFED goals and its connection to local watershed protection efforts. Articles will be placed in agricultural and developer publications.

A Coordinator will provide a single point of contact for coordination with CALFED and its member agencies. He/she will also provide the framework for establishing and spearheading locally led decisionmaking among the stakeholders. Other activities include organization of data into a watershed management plan, information exchange, outreach activities, monthly meetings, and fiscal management. For example, scientific information currently available only through file reviews at individual agencies in various formats will be centrally located and available on the web. CALFED can use this information to assist in the development of broad-based decisions regarding the Bay Delta system.

Environmental Justice

Equity and justice are important issues in environmental decision making. Special outreach efforts will be undertaken to encourage participation by often overlooked groups. Facilitated focus groups will bring the views of currently underrepresented stakeholders to the CRMP, which could include the farm worker community, a principally Hispanic presence in the greater Lincoln area. Because inequities often establish barriers of communication and trust between government and communities, the successful implementation of watershed restoration programs can be facilitated by giving all residents a voice in decision making. Through the CRMP process, consensus is developed.

The Coordinator will be responsible for bringing people together from all sectors including business, agriculture, developers, educators, children, planners, civic leaders, community associations and residents to ensure that watershed plans capture the values and interests of the community. The community and involved stakeholders, through a series of meetings, forums and open houses, must reach consensus that the improvements proposed are necessary.

Focus groups will also solicit input from two divergent, and currently underrepresented, stakeholder groups: the agricultural and development communities. They will be specifically organized to address issues relevant to rural Sutter County. The facilitator will be responsible for informing these groups about the goals of CALFED and encouraging their involvement. Focus group participants will provide an information conduit directly to other members of their group as part of their daily routines.

C. Project Sustainability

In order to produce a workable and widely accepted watershed plan, the planning process must involve both public agencies and the concerned public. With the demand on the watersheds' resources, and the constraints on the financial resources necessary to protect it, public agencies and concerned citizens must join forces. It has become necessary and desirable for the public to become involved to produce long-term results.

The CRMP group is working to coordinate actions within and across agencies, developing special programs which focus on watersheds, and building interest and capacity for local stewardship, thereby ensuring sustainability. Outreach efforts will increase CRMP stakeholder diversity and coordinate critical partnerships necessary to gain consensus support for any proposed restoration action recommended by the watershed management plan. Productive working relationships at the watershed level are necessary to keep the restoration process moving.

Sustainability is obtained through interaction and collaboration among local stakeholders, organizations, and communities working with government to identify and solve 'their' problems through consensus-oriented decisions. The goal is more durable and implementable plans and solutions rather than traditional regulatory-dominated approaches.

Expansion of the citizens' monitoring group will increase the active participation of landowners, high school students and other members of the community interested in watershed protection. Increased participation by landowners, school groups and other interested community members will educate participants in principles of watershed stewardship.

Organized outreach efforts and trust building will replace fragmented and erroneous information currently exchanged among landowners and other stakeholders regarding CALFED program goals and objectives. The CRMP group, sampling volunteers and other stakeholders can continue the

program and involvement in the CALFED Bay-Delta Program after this program is completed. The County, CRMP members, and the team of volunteers will involve the community in efforts to understand the water quality problems in the watersheds locally and regionally on a continuous basis.

5. Project Monitoring

Due to the long timeline for seeing results, there is a need for gathering sound baseline data, establishing long-term monitoring programs in order to assess outcomes, defining a desired watershed condition, and managing adaptively.

A. Performance Measures

Basic chemical and physical properties of streams are important indicators of watershed health. An understanding of how these parameters change during the course of the year on different streams with varying natural and human-induced environmental conditions will assist establishing restoration priorities in the watersheds.

A comprehensive watershed-based monitoring program will be implemented at the outset of the program. Development of a water quality program consists of establishment of monitoring parameters, data collection, analysis, and result presentation.

B. Local and Regional Coordination

This project coordinates habitat restoration activities, watershed analyses, monitoring, inventory, planning and outreach activities. In this integrated planning, opportunities exist for meeting many needs simultaneously. The most important potential benefit of this project is identification of opportunities for “win-win” strategies. For example, maintaining water supply and agricultural productivity is an important issue for these watersheds. Riparian and wetlands restoration are equally important. The City of Roseville is presently constructing a wastewater treatment plant on Pleasant Grove Creek. The CRMP process will make it possible to identify integrated approaches to meeting these needs simultaneously.

The project has the support of the Placer County Board of Supervisors (see attached resolution). Also, CRMP members include representatives from local, federal and state management agencies in the watershed as well as citizens and public and private interest groups. The Auburn Ravine-Coon Creek watershed group is a participant in the Sacramento River Watershed Program. This broad base of community support and participation ensures that recommendations are compatible with local desires, plans, policies and ordinances, and ultimately, implementable. The development and agricultural community, a significant presence in the western portion of the watersheds, will be actively recruited to participate in focus groups and the CRMP working group.

The Pleasant Grove/Curry Creek CRMP will include a comprehensive watershed-based monitoring program consistent to what is taking place in Auburn Ravine. Because the CRMP committee consists of government, business, and environmental leaders in the region, there is an excellent opportunity to develop an expanded and cooperative monitoring program which can be implemented immediately.

The CRMP working group will complete compilation and review of existing data for the watersheds to assess needs and opportunities. Additional data will be gathered or acquired as needed. With assistance from the Planning Department’s Geographic Information System Division, GIS activities will be integrated into the process. For instance, overlay analysis, buffering, acreage and stream-length calculations will be conducted. Maps will be generated as needed. A GIS database will be compiled from monitoring activities and other sources.

The monitoring program will focus on indicators of ecological integrity and health, consistent with the CALFED Bay-Delta monitoring program, and consistent with 79080(g). The monitoring and reporting plan will also contain success/failure criteria for individual ecosystem enhancement projects recommended for future implementation. All information gathered will be posted on the County web page, shared amongst agencies, and will be provided to CALFED.

C. Citizen Monitoring

Baseline water quality monitoring in the PG/CC watersheds is to be conducted to support development of the Coordinated Resource Management Plan and complement the Regional Water Quality Control Board's sampling program. Monitoring is necessary to assess current water quality and the effects of future watershed restoration activities.

Although baseline water quality monitoring is to be conducted by professionals, the key to the success of future restoration activities, and ultimately to the development and implementation of the AR/CC and PG/CC management plans, will be involvement and commitment of the landowners and general public. Water quality testing provides and excellent means for the concerned public to collect hands-on experience with the streams.

Expansion and enhancement of an ongoing citizen monitoring program is planned. The collection of samples within the watersheds is relatively labor-intensive, and the success of this effort will depend to a large extent on volunteers. Additional equipment will be purchased to allow volunteers to gather data used to characterize the watersheds. Other equipment and test kits are to be supplied by Placer County through an equipment loan program and general funds. The Auburn Ravine/Coon Creek CRMP and Citizen Monitoring groups have been active for over three years. Commitment to community-based planning and stewardship among existing stakeholders is well established. Expanded landowner participation is critical to any restoration actions proposed, as the lands in the watersheds are principally privately owned.

The current Citizen Monitoring Group is made up of community members and landowners within the AR/CC watershed. This project will expand this group to include community members and landowners in each of the watersheds. The existing group will provide a CALFED program overview, training, equipment and on-going support for this effort.

The existing citizen monitoring program will recruit volunteers and promote stewardship throughout the watershed, purchase additional monitoring equipment and expand existing watershed programs at two local high schools. Data management and organization of the Citizen Monitors will be the responsibility of the Watershed Coordinator. The Coordinator will also act as liaison between community leaders, local agency representatives and CALFED member agencies.

An operations manual will be developed as a guide for public participation. The manual will include sampling and evaluation protocol and techniques that are easily performed by non-experts, with the help of training and education materials, so the CRMP group, sampling volunteers and other stakeholders can continue the program after the Coordinated Resource Management Plan is completed. The organization of a team of volunteers will involve the community in efforts to understand the water quality problems in the watersheds. This effort will include:

- Coordinating and publicizing the effort to recruit volunteers
- Training sessions for volunteers
- Oversight of the volunteers to discuss problems and review of their work
- Manage data

Monitoring is expected to lead to improved knowledge, information exchange and increased participation in watershed protection by landowners, students and other interested community groups. Through consensus-based decision-making, restoration actions requiring community support will be more likely be approved as a result of this outreach program.

D. Monitoring Protocols

A Quality Assurance Project Plan (QAPP) will be developed to describe in comprehensive detail the necessary Quality Assurance (QA), Quality Control (QC), and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the state performance criteria.

The QAPP is to assure that:

- The project's technical and quality objectives are identified and agreed upon
- The sampling protocol, data generation, or data acquisition methods are appropriate for achieving the established project objectives
- Data analysis and interpretation methodologies and procedures are sufficient for confirming that data type and quality needed and expected are obtained
- Any limitation on the use of the data is identified and properly documented

The QAPP will be composed of standardized, recognizable elements covering the entire project from planning through implementation. Overall project management will include defined goals and approaches and documented planning outputs. The appropriate methods for sampling, measurement and analysis, data generation, data handling and QC activities will be employed and property documented. After the completion of data collection, data validation and usability will be implemented to ensure that data conform to the specified criteria.

Basic chemical and physical properties of streams are important indicators of watershed health. An understanding of how these parameters change during the course of three years on the four creeks with varying natural and human-induced environmental conditions will help to establish priorities for the watershed. A monitoring program will be developed and implemented to assess the baseline water quality of the watersheds. Tests would provide an index of the health of the ecosystem of the creeks and their tributaries to support development of the CRMPs.

For establishing the baseline database and assessing water quality of the watershed, physical, chemical and biological parameters (aquatic fauna and streamside vegetation) will be monitored. Biological parameters will include aquatic fauna and streamside vegetation (total vegetative cover, relative cover of wetland species, species richness, and canopy shading). Data will be managed using software such as the Central Coast Ambient Monitoring Program (CCAMP).

A significant aquatic invertebrate component will also be included. Benthic macroinvertebrate data are an important addition to any information gathered from water samples with a picture of long-term physical and chemical stream conditions. It is anticipated that the data will be analyzed using a variety of procedures and indices, such as the Index of Biological Integrity (IBI), the Biotic Condition Index (BCI), the Ephemeroptere-Plecoptera-Trichoptera Index (EPT Index), and specific disturbance values combined with an evaluation of physical and chemical parameters measured during the invertebrate surveys and water quality collections.

Access is needed to conduct assessments. A representative sample of sites will be selected for analysis. The access problem must be overcome in order to provide an analysis of the condition of the watersheds. In the past, the County has been able to provide access to creeks on County-owned land or by willing landowners. This will be supplemented with access from public rights-of-way (i.e. overpasses). As additional landowners are recruited, access will be expanded.

E. Benefits to Local Decision Making

Collaboration and sharing of information is a key component of the watershed planning process. All issues and interests are at the table. A comprehensive watershed plan will drive decisions for all stakeholders into the future. Public support will be sought throughout the process. Prioritized recommendations for future action will be prepared.

Implementation of the CRMP for PG/CC will help improve anadromous fish habitats for steelhead, spring-run chinook, fall-run chinook and native species such as splittail and delta smelt. These benefits may occur directly in the stream or indirectly by contributing to the improvement of the Bay-Delta watershed. Improvements in water quality will occur and benefit downstream water users. Flood control issues can be addressed, for example, through riparian/floodway/floodplain conservation easements that also benefit a myriad of wildlife species. Monitoring will measure implementation success.

Scientific information gained from a refinement of the current ERP will be used for improved decision-making with respect to water and ecosystem quality. Data and observations collected and reported by watershed monitoring activities augment agency data generation capacities, help agencies improve their understanding of watershed systems, and serve a 'watchdog' function. All information will be integrated into a single Geographic Information System (GIS) database and incorporated into a comprehensive management plan database.

The project will partner with Central Valley Regional Water Quality Control Board's bioassessment in Auburn Ravine and Pleasant Grove Creeks, two Effluent Dominated Water bodies (EDW). Many of the small water bodies in the Central Valley are naturally ephemeral or experience very low flow during the summer, and the characteristics of many of the streams are dominated by municipal wastewater treatment plant discharges. Wastewater discharge to these Effluent Dependent Water bodies may either degrade or enhance beneficial uses.

It is the RWQC Board's desire to work at the watershed level to facilitate monitoring and assessment efforts, a critical component of any policy designed to address Effluent Dependent Water bodies. The project includes gathering baseline data, monitoring existing EDWs, and comparing existing EDWs with unimpacted reference streams from the same area. Since the physical, chemical and biological attributes in a watershed are relatively familiar, effective watershed solutions could be developed. Guidelines would be supported by relevant baseline data and applicable to all EDWs within the watershed. Several years of data, with two water quality assessments per year, is needed to develop policy. Once developed, the policy could streamline permitting efforts for other EDWs.

6. Scientific Basis

A. Previous Watershed Condition Assessments

An Ecosystem Restoration Plan is currently under development for Auburn Ravine and Coon Creek and is scheduled for completion in December 2001. However, the plan is broadly scoped and the hydrologic model for the ERP was developed to generally characterize present and future flow and water quality conditions. At present, this model is not suited to address water quality issues at the time-step nor have the period of record necessary to support effluent-dominated water body issues. It does form the basis upon which a more detailed model can be built.

Additional refinement is needed as the watershed is highly complex in terms of water delivery for irrigation, rapidly changing land use patterns, wastewater treatment plant siting and flood control. Additional funding will permit expansion of each of these elements in greater detail.

7. Compatibility with CALFED Objectives

Utilization of the existing CRMP committee to oversee the work outlined by this proposal is compatible with and essential to local implementation of CALFED's programs.

A. Water Supply and Quality/Ecosystem Quality

Implementation of the Coordinated Resource Management Plans will reduce a number of primary stressors identified by CALFED in the Ecosystem Restoration Program Plan including:

- Alteration of flows and other effects of water management
- Land use, floodplain and marshplain changes
- Channel form changes
- Water quality and temperature

Reduction and/or removal of these stressors will provide benefits to species such as steelhead, spring-run and fall-run chinook salmon, splittail, delta smelt, red and yellow legged frogs, and preservation and restoration of riparian areas. Water quality will be enhanced as restoration projects identified in the plans are implemented.

The monitoring program will focus on indicators of ecological integrity and health, similar to and consistent with the CALFED Bay-Delta monitoring program, and consistent with 79080(g). The

monitoring and reporting plan will also contain success/failure criteria for individual ecosystem enhancement projects recommended for future implementation.

B. Watershed Processes and Management

There is currently no comprehensive road map for land use in this watershed that bridges the gap between the County and City General Plans and the full range of environmental and economic issues that can be covered in a CRMP. The concept for this project is built on the CALFED Watershed Program Goals and Objectives. At appropriate stages of CRMP development, the CRMP working group will hold public information meetings, to ensure that all interested parties have an opportunity to comment on and participate in the development of the CRMP. CRMP meetings, where policy development decisions are made, are open to the general public. Adopting a watershed-based approach is only possible if it is accompanied by an education/outreach program that builds a constituency and rationale for protecting the resources. Citizen monitoring is another avenue for public participation.

The work is consistent with the CALFED goals for the Bay-Delta system and is an integral part of the broader solution area.

- **Builds community capacity** through the citizen monitoring component, by having an open CRMP development process, and through community outreach and education on the importance of protecting the streams and riparian
- Conducts a **watershed assessment** in PG/CC which results in a **watershed plan**
- Will recommend **watershed conservation, maintenance and restoration actions** for implementation
- Refines and expands the AR/CC **Ecosystem Restoration Plan** assessment underway
- Expected outcome is to discover, analyze and, through a **consensus** process, agree on restoration actions
- **Coordinate** all work amongst agencies, stakeholders and the public in the watersheds

The CRMP will function much like CALFED's programmatic documents, providing a general framework within which to evaluate more specific proposals for projects and identifying a number of potential rehabilitation projects. This should result in improved aquatic and terrestrial habitats and ecological functions both within Placer and Sutter Counties and the Bay-Delta.

C. Environmental Lead Agency

The Placer County Planning Department will serve as lead agency. No permits have been obtained to date. In general, specific project-level environmental documentation for environmental protection and restoration actions will not be addressed, but the CRMP will identify probable issues to be addressed and strategies for CEQA/NEPA studies and documentation. This is a discretionary project which will result in the adoption of a plan.

There will be an intermediate and cumulative impact analysis of recommended projects. The County will work with the working group and consultant to determine which prioritized projects are subject to CEQA/NEPA review. Some projects may require additional environmental review once funding has been secured and a work program has been written for individual projects.

A Habitat Conservation Plan, currently under development by Placer County, will aid in streamlining permit processes required of any restoration actions recommended in the AR/CC and PG/CC CRMPs.

8. Misc. Elements

The development of a Coordinated Resource Management Plan for the Pleasant Grove and Curry Creek watersheds is a necessary element to address the impacts on an urbanizing watershed and to improve the ecological health of the Bay-Delta Region.

Placer County had a 2000 population of 248,399, an increase of 43.8 percent over the 1990 population. The population is more than double the 117,247 residents who resided in the county in 1980. The rate of growth continues to exceed that of California and the Greater Sacramento area. Census data puts Placer in second place behind only San Benito County's 45.1 percent growth rate. The population of, and number of housing units in, Placer County will double between 1997 and 2022.[1] Clearly, Placer County's urbanized landscape will substantially increase in size and scope.

Placer County includes some of the most attractive living and working environments in the United States. Rapid growth of population and attendant development has put tremendous pollutant and demand pressures on wetlands and other resources. The County also faces issues with endangered and threatened species and habitats. The rapid and dramatic changes to the landscape to accommodate this growth have resulted in the irreversible conversion of numerous natural communities including a variety of wetland habitats. It is generally recognized that current wetland mitigation practices have resulted in a general loss of wetland values in Placer County. These mitigation efforts are based upon a project-by-project evaluation of impacts with a project-specific mitigation requirement implemented in the absence of a comprehensive wetland conservation strategy.

Growth patterns and population projections confirm that Placer County's urbanized landscape will substantially increase in size and scope. During the past decade, increased attention on smart growth, compact development, affordable housing, farmland preservation, and related issues has underscored the need for bold efforts in order to effectively manage growth and change. Through the strong and active support of citizens and political leadership, the Placer Legacy program and the HCP/NCCP will be the framework for guiding development and protecting open lands. In addition, local watershed plan implementation should produce measurable results for typical urban watershed stressors such as flood control, storm water quality, erosion and siltation.

Through the development of the CRMP, opportunities exist for meeting many needs simultaneously. Maintaining water supply and agricultural productivity is an important issue. Riparian and wetlands restorations are equally important. The CRMP process will make it possible to identify integrated approaches to meeting needs. Without a CRMP, and without public participation and support, it is much more difficult to recognize and plan for beneficial, feasible strategies throughout the geographic scope of the watershed.

[1] Projections Summary for the Sacramento Region. Housing, Population & Employment: 1997-2022. Sacramento Area Council of Governments. July 1999.

E. Task	F. Sub-Task	Description	Deliverable	Completion	Match	CALFED	Total
One	**G. Administration**				**$38,753.50**	**$21,507.00**	**$60,260.50**
1A	H. Consultant RFP, Selection, and Contract	Secure the services of a professional consultant to prepare the CRMP.	• RFP and proposals. • Work Plan and contract.	9/02			
1B	I. Technical Advisory Committee (TAC)	Liaison between CRMP and consultant, provides specialized feedback.	• TAC membership and meeting summaries.	9/02			
1C	J. CEQA/NEPA Compliance	Obtain CEQA and NEPA approval of ERP/CRMP.	• CEQA/NEPA documents.	3/04			
	K. Success Criteria:	Project completed on time and on budget. Reporting requirements satisfied.					
Two	**L. AR/CC ERP**				**$0**	**$30,000**	**$30,000**
2A	M. Review ERP/Prepare Desired Condition Report	CRMP, Technical Advisory Committee and Public evaluate recommendations.	• Desired Condition Report	3/02			
2B	Improve Hydrologic Model	HSPF model refinement to cover 50 year hydrologic component; characterize hourly flows; model nutrient and pollutant contributions	• A Detailed Hydrologic and Pollutant Load Characterization	6/03			
2C	N. ERP Finalization	CRMP, Technical Advisory Committee and Public evaluate recommendations.	• Final Ecosystem Restoration Plan	9/03			
	O. Success Criteria:	Stakeholder Endorsement of Ecosystem Restoration Plan and Prioritized list of projects.					
Three	**P. CRMP**				**$0**	**$125,000**	**$125,000**
3A	Evaluate Existing Studies and Data	Assist CRMP members and County staff in assessing the current status of environmental and human resources in the watersheds.	• Field data needs.	12/02			
3B	Habitat Assessment	Evaluate existing conditions and functions.	• Report and map showing habitat types.	6/03			
3C	Baseline Database for Water Quality	Establish a base line condition for the streams.	• GIS data lists.	8/03			
3D	Comprehensive Resource Management Plan	Baseline analysis, data collection, development and evaluation of	• Summary report and findings.	12/03			

	Plan	alternatives.	• Priority list of projects for implementation. • Draft and Final CRMP.				
3E	Prioritized List of Projects	Identifying feasible projects for future funding which will improve water quality and restore aquatic habitat.	• Implementation list in CRMP.	12/03			
	Q. Success Criteria:	Stakeholder Endorsement of Implementation Priority List. A CRMP adopted by various stakeholder groups or agencies within the watershed. GIS database of watershed information available to the public.					

R. Task	**S. Sub-Task**	**Description**	**Deliverable**	**Completion**	**Match**	**CALFED**	**Total**
Four	**Public Outreach**				**$9,250**	**$19,750**	**$29,000**
4A	Create CRMP group	Public-private stakeholder group to oversee the work plan of this project.	• Membership list. • Meeting minutes.	COMPLETED			
4B	Outreach and Involvement Plan	Strategic plan identifying outreach goals, targets and implementation measures	• Community Involvement Plan.	9/02			
4C	Conduct Extensive Outreach	Create and distribute newsletters, fact sheets, and other educational materials. Conduct public forums and meetings.	• Copies of material produced, distribution list(s). • Number held, attendance sheets.	6/05 and ongoing			
4D	T. Document Library	Designating a convenient location where documents and references can be reviewed by the public.	• Location and information on file.	12/02 and ongoing			
4E	U. Web Site	Updated information and data sets linked to Placer County's web page.	• Operating and current internet site.	9/02 and ongoing			
	V. Success Criteria:	Increased Citizen Awareness and Participation: Number of mailings, number of meetings, number of participants, newsletter, web visits, etc. Community-Endorsed Watershed Management Plans. Stakeholder adoption and buy-in of plan. Projects move to implementation stage.					
W. Five	**Citizen Monitoring**				**$149,550**	**$56,000**	**$205,550**
5A	Sampling and Monitoring Plan	Comprehensive monitoring program for the watersheds.	• Sampling and Monitoring Plan.	12/02			
5B	Quality Assurance Project	Monitoring parameters,	• QAPP	12/02			

	Plan	criteria, and details.					
5C	D. Expand citizen monitoring program to include all of the watersheds.	Establish a permanent monitoring program in order to collect watershed condition information.	• Monitoring team database. • Minimum 10 persons trained.	12/02 and ongoing			
5D	E. Equipment purchase	Purchase of chemical and macroinvertabrate sampling equip/supplies.	• Equipment purchase list.	12/02			
5E	F. Development of Operations Manual	A guide for public participation in the program.	• Draft and final Manual.	12/02			
5F	G. Data Management	Organize data collected into a local, centralized database in a format that supports both spatial data and web-based access.	• Monitoring information posted to a database (i.e. CCAMP).	3/03 and ongoing			
	X. Success Criteria:	A comprehensive monitoring plan with one point-of-contact organizing the effort. Standardized, on-going sampling program with quality assurance controls in place. Citizen monitors, likely property owners, recruited to cover the watersheds. Equipment purchased for a minimum of three teams.					
Y. Task	**Z. Sub-Task**	**Description**	**Deliverable**	**Completion**	**Match**	**CALFED**	**Total**
Six	**H. Coordinator**				**$1,500**	**$162,000**	**$163,500**
6A	Retain Coordinator	Coordinate outreach, education, and monitoring activities.	• Monthly and quarterly report of activities.	9/02			
6B	Citizen Monitor Recruitment.	Enlist additional citizen monitors.	• Database of citizen monitoring team.	12/02			
	AA. Success Criteria:	Facilitate communications between residents and CRMP/agencies. Foster better relationships in the community. Provide a new avenue for communication. Link citizens to information. Identify and discuss issues and opportunities affecting the future of the watershed.					
Seven	**I. Reporting/Presentations**				**$5,753.50**	**$11,507.00**	**$17,260.50**
7A	BB. Project Management and Reporting	Program oversight, management and reporting.	• Quarterly Progress Reports. • Invoices.	6/05			
7B	Final Report	Summarizing project implementation.	• Draft Final Report. • Final Report.	5/05			

7C	Presentation	Final summary presentation to CALFED	• Presentation.	6/05			
	CC. Success Criteria:	Project meets goals and objectives, implemented on-time and on-budget, products completed and submitted to CALFED.					

Total, 3-Year Budget by Task

Task	Description	Hours	Rate	Overhead (43.84%)	Total Labor	Services	Travel	Supplies/ Materials	Sub-Contract	Match	CALFED	Total
1	Administration	288	28.96	$12.70	$11,996.95	$0.00	$0.00	$0.00	$0.00	$38,753.50	$21,507.00	$60,260.50
2	AR/CC ERP Refinement	0	-	-	-	$0.00	$0.00	$0.00	$30,000.00	$0.00	$30,000.00	$30,000.00
3	PG/CC CRMP	0	-	-	-	$0.00	$0.00	$0.00	$125,000.00	$0.00	$125,000.00	$125,000.00
4	Public Outreach	0	-	-	-	$21,750.00	$1,500.00	$5,750.00	$0.00	$9,250.00	$19,750.00	$29,000.00
5	Citizen Monitoring	0	-	-	-	$0.00	$0.00	$60,000.00	$0.00	$40,000.00	$20,000.00	$60,000.00
	Citizen Monitors	2,970	15	-	$44,550.00	$36,000.00	$15,000.00	$0.00	$0.00	$59,550.00	$36,000.00	$95,550.00
	Dept. of Water Resources	1,500	20	-	$30,000.00	$0.00	$0.00	$0.00	$0.00	$30,000.00	$0.00	$30,000.00
	Science Educ. Program	1,000	20	-	$20,000.00	$0.00	$0.00	$0.00	$0.00	$20,000.00	$0.00	$20,000.00
6	Watershed Coordinator	5,720	18.96	$8.31	$155,996.21	$0.00	$3,500.00	$4,000.00	$0.00	$1,500.00	$162,000.00	$163,500.00
7	Reporting/Presentations	288	28.96	$12.70	$11,996.95	$0.00	$0.00	$0.00	$0.00	$5,753.50	$11,507.00	$17,260.50
					$274,540.10	**$57,750.00**	**$20,000.00**	**$69,750.00**	**$155,000.00**	**$204,807.00**	**$425,764.00**	**$630,571.00**

Overhead Rate of **43.84%** includes general office staff, offices, phones, furniture.

Year One Budget

Task	Description	Hours	Rate	Overhead (43.84%)	Total Labor	Services	Travel	Supplies/ Materials	Sub-Contract	Match	CALFED	Total
1	Administration	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$12,917.83	$7,169.00	$20,086.83
2	AR/CC ERP Refinement	0	-	-	-	$0.00	$0.00	$0.00	$15,000.00	$0.00	$15,000.00	$15,000.00
3	PG/CC CRMP	0	-	-	-	$0.00	$0.00	$0.00	$62,500.00	$0.00	$62,500.00	$62,500.00
4	Public Outreach	0	-	-	-	$7,250.00	$500.00	$1,916.67	$0.00	$3,083.33	$6,583.33	$9,666.67
5	Citizen Monitoring	0	-	-	-	$0.00	$0.00	$20,000.00	$0.00	$13,333.33	$6,666.67	$20,000.00
	Citizen Monitors	990	15	-	$44,550.00	$12,000.00	$5,000.00	$0.00	$0.00	$19,850.00	$12,000.00	$31,850.00
	Dept. of Water Resources	500	20	-	$30,000.00	$0.00	$0.00	$0.00	$0.00	$10,000.00	$0.00	$10,000.00
	Science Educ. Program	333	20	-	$20,000.00	$0.00	$0.00	$0.00	$0.00	$6,666.67	$0.00	$6,666.67
6	Watershed Coordinator	1,560	18.96	$8.31	$42,544.42	$0.00	$1,166.67	$1,333.33	$0.00	$500.00	$44,544.42	$45,044.42
7	Reporting/Presentations	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$1,917.83	$3,835.67	$5,753.50
					$145,092.38	**$19,250.00**	**$6,666.67**	**$23,250.00**	**$77,500.00**	**$68,269.00**	**$158,299.09**	**$226,568.09**

Year Two Budget

Task	Description	Hours	Rate	Overhead (43.84%)	Total Labor	Services	Travel	Supplies/ Materials	Sub-Contract	Match	CALFED	Total
1	Administration	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$12,917.83	$7,169.00	$20,086.83
2	AR/CC ERP Refinement	0	-	-	-	$0.00	$0.00	$0.00	$15,000.00	$0.00	$15,000.00	$15,000.00
3	PG/CC CRMP	0	-	-	-	$0.00	$0.00	$0.00	$62,500.00	$0.00	$62,500.00	$62,500.00
4	Public Outreach	0	-	-	-	$7,250.00	$500.00	$1,916.67	$0.00	$3,083.33	$6,583.33	$9,666.67
5	Citizen Monitoring	0	-	-	-	$0.00	$0.00	$20,000.00	$0.00	$13,333.33	$6,666.67	$20,000.00
	Citizen Monitors	990	15	-	$44,550.00	$12,000.00	$5,000.00	$0.00	$0.00	$19,850.00	$12,000.00	$31,850.00
	Dept. of Water Resources	500	20	-	$30,000.00	$0.00	$0.00	$0.00	$0.00	$10,000.00	$0.00	$10,000.00
	Science Educ. Program	333	20	-	$20,000.00	$0.00	$0.00	$0.00	$0.00	$6,666.67	$0.00	$6,666.67
6	Watershed Coordinator	2,080	18.96	$8.31	$56,725.89	$0.00	$1,166.67	$1,333.33	$0.00	$500.00	$58,725.89	$59,225.89
7	Reporting/Presentations	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$1,917.83	$3,835.67	$5,753.50
					$159,273.86	**$19,250.00**	**$6,666.67**	**$23,250.00**	**$77,500.00**	**$68,269.00**	**$172,480.56**	**$240,749.56**

Year Three Budget

Task	Description	Hours	Rate	Overhead (43.84%)	Total Labor	Services	Travel	Supplies/ Materials	Sub-Contract	Match	CALFED	Total
1	Administration	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$12,917.83	$7,169.00	$20,086.83
2	AR/CC ERP Refinement	0	-	-	-	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	PG/CC CRMP	0	-	-	-	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	Public Outreach	0	-	-	-	$7,250.00	$500.00	$1,916.67	$0.00	$3,083.33	$6,583.33	$9,666.67
5	Citizen Monitoring	0	-	-	-	$0.00	$0.00	$20,000.00	$0.00	$13,333.33	$6,666.67	$20,000.00
	Citizen Monitors	990	15	-	$44,550.00	$12,000.00	$5,000.00	$0.00	$0.00	$19,850.00	$12,000.00	$31,850.00
	Dept. of Water Resources	500	20	-	$30,000.00	$0.00	$0.00	$0.00	$0.00	$10,000.00	$0.00	$10,000.00
	Science Educ. Program	333	20	-	$20,000.00	$0.00	$0.00	$0.00	$0.00	$6,666.67	$0.00	$6,666.67
6	Watershed Coordinator	2,080	18.96	$8.31	$56,725.89	$0.00	$1,166.67	$1,333.33	$0.00	$500.00	$58,725.89	$59,225.89
7	Reporting/Presentations	96	28.96	$12.70	$3,998.98	$0.00	$0.00	$0.00	$0.00	$1,917.83	$3,835.67	$5,753.50
					$159,273.86	**$19,250.00**	**$6,666.67**	**$23,250.00**	**$0.00**	**$68,269.00**	**$94,980.56**	**$163,249.56**